SEP 2 1 2006

Docket No.: 02-1006 PATENT

# **REMARKS**

#### **Introductory Comments**

The Office Action rejects claims 1-30 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0114437 ("Nabkel") in view of U.S. Patent Publication No. 2003/0223403 ("Higgins") and U.S. Patent No. 6,044,403 ("Gerszberg").

Independent claims 1, 19, 25, 29, and 30 have been amended as shown herein. Claims 13 and 28 have been canceled without prejudice or disclaimer. New dependent claims 31 and 32 have been added. No new matter has been introduced. Consequently, claims 1-12, 14-27, and 28-32 are pending in the application.

For the following reasons, Applicants respectfully traverse the rejection and request favorable reconsideration of the presently pending claims. Further, Applicants believe that there are also reasons other than those set forth below why the pending claims are patentable, and reserve the right to set forth those reasons, and to argue for the patentability of claims not explicitly addressed herein, in future papers.

### Rejection of Claims 1-30 under 35 U.S.C. §103(a)

On page 2 of the Office Action, the Examiner rejected claims 1-30 under 35 U.S.C. §103(a) as being unpatentable over Nabkel in view of Higgins and Gerszberg. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed Cir. 1992)." M.P.E.P. § 2143.01. Thus, a prima facie case of obviousness requires: (1) a suggestion or motivation to modify or combine the reference teachings; (2) a reasonable expectation of success; and (3) a teaching or suggestion in the prior art references of all of the claim limitations (MPEP 2143). For the following reasons, Applicants respectfully traverse the rejection of claims 1-12, 14-27, 29, and 30. The rejection of canceled claims 13 and 28 is obviated.

**PATENT** 

## A. Independent Claims 1, 19, 25, 29, and 30

As amended, independent claims 1, 19, 25, 29, and 30 each recite claim limitations that are not taught or suggested in Nabkel, Higgins, Gerszberg, or the asserted combination thereof. Independent claim 1 now recites:

1. A telephony system, comprising:

a service node configured to communicate with a user device and provide a user associated with the user device with an automated voice interface to the telephony system upon the user's initiating access to the telephony system via the user device.

wherein the automated voice interface is configured to permit the user to verbally specify a desired objective corresponding to any one of a plurality of predefined objectives, the predefined objectives including directory assisted call placement and at least one form of information retrieval,

and wherein, upon receiving the desired objective from the user, the service node acts to implement the desired objective, wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to:

request, by voiced instruction, the user's verbal specification of an information item,

retrieve the verbally specified information item from an information source, and

voice the information item to the user via the user device.

(Emphasis added.)

Independent claim 19 now recites:

19. A service node for use in a telephony system including a switch, the switch providing system access for a user device, the service node comprising:

logic configured to communicate, via the switch, with the user device and to provide a user of the telephony system with an automated voice interface upon the user's initiating access to the telephony system via the user device,

wherein the automated voice interface is configured to permit the user to verbally specify a desired objective corresponding to any one of a plurality of predefined objectives, the predefined objectives including call placement and at least one form of information retrieval,

and wherein, upon receiving the desired objective from the user, the service node acts to implement the desired objective, wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to:

**PATENT** 

request, by voiced instruction, the user's verbal specification of an information item,

retrieve the verbally specified information item from an information source, and

voice the information item to the user via the user device.

(Emphasis added.)

Independent claim 25 now recites:

25. A method of providing a user of a telephony system with an automated voice interface, comprising:

voicing a request to the user, upon the user's initiating access to the telephony system, that the user identify an intended objective;

awaiting the user's response to the voiced request;

selecting, based upon the user's response, one of a plurality of predefined objectives, the predefined objectives including directory assisted call placement and at least one form of information retrieval; and

acting to implement the selected objective, wherein, when the selected objective is a form of information retrieval, the acting to implement the objective comprises:

requesting, by voiced instruction, the user's verbal specification of an information item,

retrieving the verbally specified information item from an information source, and

voicing the retrieved information item to the user.

(Emphasis added.)

Independent claim 29 now recites:

29. A telephony system, comprising:

means for detecting a user's initiating access to the telephony system; means for soliciting, upon the user's initiating access to the system, the user's verbal specification of one of a plurality of predefined objectives, the predefined objectives including directory assisted call placement and at least one form of information retrieval; and

means for implementing the verbally specified objective, wherein when the user specifies a desired objective relating to information retrieval, the implementing includes:

requesting, by voiced instruction, the user's verbal specification of an information item.

**PATENT** 

retrieving the verbally specified information item from an information source, and

voicing the retrieved information item to the user.

(Emphasis added.)

Independent claim 30 now recites:

30. A computer-readable medium including a plurality of instructions that, when executed by a service node in a telephony system, cause the service node to function as an automated telephone attendant, the computer-readable medium comprising:

instructions for voicing a request to a telephone user that the user state an intended objective;

instructions for selecting, based upon the user's stated objective, one of a plurality of predefined objectives, the predefined objectives including directory assisted call placement and at least one form of information retrieval; and

instructions for acting to implement the selected objective, wherein when the selected objective relates to information retrieval, the acting to implement includes:

requesting, by voiced instruction, the user's verbal specification of an information item, retrieving the verbally specified information item from an information source, and voicing the retrieved information item to the user.

(Emphasis added.)

The amendments to the claims are fully supported by the specification. For example, see original claim 13 (now canceled). Further, Applicants' specification states:

[0016] Generally, systems and methods consistent with the present invention provide a voice-based, rather than a key-sequence-based, user interface for telephony. Such a voice-based user interface serves as a personal telephone attendant, or personal telephone concierge, accessing and retrieving audio and/or text information based on a subscribing user's spoken instructions.

[0017] In exemplary wireline implementations, the dial tone conventionally provided by the public switched telephone network (PSTN) is replaced by a voiced greeting. In exemplary wireless implementations, the voiced greeting is presented upon the user's dialing, either manually or by voice-activation, an attendant-specific code (e.g., a short key sequence beginning with "#" or "\*" and followed by "send").

[0018] Upon receiving the voiced greeting, the user states his or her desired objective. For example, the user may wish to place a directory assisted call, or may instead wish to retrieve information from a third-party source (e.g., weather, stock quotes, driving directions, etc.). Accordingly, the voice-based system interface (also referred to hereinafter as the personal attendant or, more simply,

**PATENT** 

the attendant) applies speech recognition to decipher the user's statement and thereby determine the nature of the user's intent.

[0019] If necessary, the personal attendant also uses voiced instructions to solicit a further refinement of the user's objective. For example, if the user wishes to place a directory assisted call, the personal attendant may solicit the user's spoken indication of the identity of the receiving party. Alternatively, if the user wishes to retrieve third-party information, the personal attendant may solicit the user's spoken indication of the precise nature of that information.

[0020] Upon determining the user's specific objective, the personal attendant retrieves the relevant information from an appropriate source (e.g., from a local or remote telephone directory database, or from a third-party vendor database) and acts to carry out the user's intent. For example, when the user wishes to place a call, the personal attendant can provide the destination number to the user's originating telephone switch so that the call can proceed automatically to completion. Alternatively, when the user requests third-party information, the personal attendant can voice the retrieved data back to the user. In such case, audio data (e.g., ".wav" or other audio format files) are played directly for the user, while other data are first converted to audio form (e.g., via text-to-speech (TTS) technology) before being played for the user.

[0021] Advantageously, systems and methods consistent with present invention free the user from having to remember or record telephone numbers. Through simple verbal interactions with the personal attendant, the user can place calls and gain access to a wide variety of information just by picking up a telephone handset, and without ever having to dial a destination number.

(Applicants' spec., paras. 0016-0021, emphasis added.)

The cited prior art references, taken alone or together, do not teach or suggest all of the elements of the amended independent claims, including claim elements directed to "wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to: request, by voiced instruction, the user's verbal specification of an information item." Emphasis added. Because the amendments to claims 1, 19, 25, 29, and 30 are based at least in part on elements recited in now canceled claim 13, the rejection of claim 13 is relevant. In rejecting claim 13 on page 3 of the Office Action, the Examiner points to paragraph 0028 of Nabkel, which states:

[0028] Additionally, a subscriber may choose in advance the option of requesting additional topics or more detailed information in real time by entering a designated code such as, for example, a "star code" sequence or other suitable input. The system of the invention herein would also provide a special "code" to

<sup>&</sup>lt;sup>1</sup> This language appears verbatim in claims 1 and 19. With respect to claims 25, 29, and 30, while the language is somewhat different, the same arguments are equally applicable.

Docket No.: 02-1006 PATENT

allow the subscriber to indicate to the network system the subscriber has finished with requesting additional topics and available or ready to place a call.

(Emphasis added.)

The cited paragraph simply mentions a subscriber being able to enter in advance a designated code, but there is no teaching or suggestion of requesting by voiced instruction that the user provide the designated code. Moreover, there is no teaching or suggestion of the designated code such as a "star code" sequence being a "verbal specification of an information item" as recited in all of the independent claims.

Further still, the cited paragraph does not include any teaching or suggestion of the entry of the designated code being requested "when the user specifies a desired objective relating to information retrieval." In contrast, paragraph 0028 of Nabkel expressly states that the designated code is for allowing a subscriber to "choose in advance the option of requesting additional topics or more detailed information." Emphasis added. This advance configuration of options coincides with the teachings of Nabkel directed to automatic presentation of pre-selected information. Nabkel discloses:

That is, rather than requiring the subscriber to pro-actively retrieve desired information by calling a service provider or generating DTMF signaling, the subscriber may simply pick-up his or her telephony device and be provided information services in accordance with an associated profile.

Nabkel, para. 0022. Accordingly, Nabkel is limited to using a designated code to pre-select information options, which is entirely different from "wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to: request, by voiced instruction, the user's verbal specification of an information item." Therefore, Nabkel does not teach or suggest these claim elements as asserted in the Office Action.

Higgins and Gerszberg do not cure, nor does the Office Action allege that these references cure, the above-described deficiencies of Nabkel. Higgins discloses a voice response unit 150 that merely provides an initial spoken greeting and awaits subscriber input. Higgins, para. 0035. However, simply providing an initial greeting and then waiting for input is not a teaching or a suggestion of "wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to: request, by voiced instruction, the user's verbal specification of an information item," as recited, or substantially recited, in the claims.

PATENT

Therefore, Higgins does not teach or suggest these claim elements.

With respect to Gerszberg, the section of Gerszberg relied on in the Office Action is limited to the use of a visual menu <u>display</u> on a personal computer and does not teach or suggest an automated voice interface that is configured to "<u>request</u>, by voiced instruction, the user's verbal specification of an information item," as recited in the claims. Emphasis added. Accordingly, a user of the system of Gerszberg must have a visual display and would have to use the visual display to provide a selection. Therefore, Gerszberg fails to teach or suggest "wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to: request, by voiced instruction, the user's verbal specification of an information item."

Because Nabkel, Higgins, and Gerszberg each fails to teach or suggest these claim elements, the asserted combination of the references also fails to teach or suggest the same claim elements, especially considering the asserted combination is a mere substitution of service platforms. The combination of the references still fails to teach or suggest "wherein when the user specifies a desired objective relating to information retrieval, the service node is configured to: request, by voiced instruction, the user's verbal specification of an information item," as recited, or substantially recited, in the claims.

For at least the foregoing reasons, Nabkel, Higgins, and Gerszberg, taken alone or in combination, do not teach or suggest each and every element recited in claims 1, 19, 25, 29, and 30 as amended, and Applicants respectfully traverse the §103 rejection of these claims.

The Office Action fails to establish a prima facie case of obviousness against claims 1, 19, 25, 29, and 30 for a separate reason: one of ordinary skill in the art would not have been motivated to combine Gerszberg with Nabkel and Higgins as asserted in the Office Action. Even if one service platform could be substituted for another service platform as alleged on page 3 of the Office Action, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1420 (Fed. Cir. 1990)." M.P.E.P. § 2143.01. Further, a reference must be considered for all it teaches, including disclosures that teach away from the invention as well as disclosures that point toward the invention. Ashland Oil, Inc. v. Delta Resins & Refractories, Inc. 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985). Gerszberg is directed to a network server platform for Internet, Java server, and video application

PATENT

server. Gerszberg, Title and Abstract. As described above, the platform of Gerszberg relies upon visual displays and the selection of visually displayed indicators to access services and, as a visually-based system, the system of Gerszberg teaches away from the asserted substitution of the platform of Gerszberg for the service platform of Nabkel and Higgins, which disclose the use of non-visual communications to access information services. Nabkel, para. 0025; Higgins, Abstract.

In addition, the substitution of the visual interface of Gerszberg for the voice interface of Nabkel and Higgins would impermissibly modify the principles of Nabkel and Higgins by eliminating their voice-based platforms. "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Rattl*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)." M.P.E.P. § 2143.02. For the above-described reasons, one of ordinary skill in the art would not have been motivated to combine Gerszberg with Nabkel and Higgins as asserted in the Office Action.

For any of the foregoing reasons, Applicants respectfully traverse the rejection of independent claims 1, 19, 25, 29, and 30. Therefore, the rejection of these claims should be withdrawn and the claims allowed.

### B. The Dependent Claims Recite Patentable Subject Matter

For the same reasons described above, dependent claims 2-12, 14-18, 20-24, 26, and 27 are in condition for allowance as claims depending directly or indirectly from independent claim 1, 19, or 25. The dependent claims also recite independently patentable subject matter not taught or suggested in Nabkel, Higgins, Gerszberg, or the combination thereof. Merely by way of example, claim 3 recites:

3. The telephony system according to claim 1, wherein the user device is a wireless telephone, and wherein the user initiates access to the telephony system by dialing a predefined key sequence.

According to the Office Action, the limitations recited in claim 3 "would be inherent in a wireless system and it would have been obvious to one of ordinary skill to migrate that which is known in wireline to wireless." Office Action, page 3. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing

Docket No.: 02-1006 PATENT

described in the reference, and that it would be so recognized by persons of ordinary skill.' Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." In re Robertson, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (citations omitted). The Office Action does not provide sufficient evidence that a user initiating access to the telephony system by dialing a predefined key sequence would be necessarily present in Nabkel, Higgins, Gerszberg, or the combination thereof. If the Examiner continues to rely upon inherency to reject claim 3, Applicants respectfully repeat their request that the Examiner expressly point out how initiating access to the telephony system by dialing a predefined key sequence is necessarily present in the prior art of record. Because these limitations are not necessarily present in the prior art of record, the rejection of claim 3 should be withdrawn.

By way of another example, claim 9 recites:

9. The telephony system according to claim 8, wherein the service control point is further configured to verify a voice interface service subscription for the user device prior to setting up a communication channel between the service node and the switch.

According to the Office Action, the limitations recited in claim 9 "would be inherent unless the service is free which is not the way business is done." Office Action, page 3. However, there is no teaching or suggestion in Nabkel, Higgins, or Gerszberg of their respective systems being limited to charging for the services provided by the systems. Therefore, the reasoning presented in the Office Action does not show that verifying a voice interface service subscription as recited in claim 9 would be necessarily present in Nabkel, Higgins, Gerszberg, or the combination thereof. Therefore, the rejection of claim 9 should be withdrawn.

### New Claims 31 and 32

Applicants have added new dependent claims 31 and 32, each of which depends either directly or indirectly from independent claim 1. The newly added claims are fully supported by Applicants' specification. For example, see paragraph 0041 and original claim 12 of Applicants' specification.

The newly added claims are thought to be patentable over the prior art of record for at least the same reasons given above with respect to the original independent claims. The new

**PATENT** 

claims also recite independently patentable subject matter. Therefore, examination and allowance of the newly added claims is respectfully requested.

248-594-0610

SEP 2 1 2006

CENTRAL FAX CENTER AGE

RECEIVED

Docket No.: 02-1006

PATENT

### CONCLUSION

All rejections have been addressed. In view of the above, the presently pending claims are believed to be in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested and the Examiner is respectfully requested to pass this application to issue. It is believed that any fees associated with the filing of this paper are identified in an accompanying transmittal. However, if any additional fees are required, they may be charged to Deposit Account 18-0013, under order number 65632-0378. To the extent necessary, a petition for extension of time under 37 C.F.R. 1.136(a) is hereby made, the fee for which should be charged against the aforementioned account.

Respectfully submitted,

Dated: 0 21 0

Michael B. Stewart

Reg. No.: 36,018 Jeffrey R. Jeppsen Reg. No.: 53,072

RADER, FISHMAN & GRAUER PLLC 39533 Woodward Avenue, Suite 140 Bloomfield Hills, Michigan 48304

Customer No.: 32127 Attorneys for Applicants